AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-18. (cancelled)

19. (currently amended) A process for manufacture of soluble branched polymers of glucose essentially containing no β-glucosidic bonds, wherein:

a) an aqueous solution of starch or of starch derivative of dry matter of 1 to 50% by weight, is subjected to a temperature greater than 130°C, under a pressure of more than 3.5 bars, for 2 to 5 mins,

b) the starch or starch derivative thus obtained is treated with 50 to 2,000 units of purified branching enzyme at a temperature lying between 25 and 50°C for a duration from 10 mins to 24 hrs, and

c) the branched polymers of glucose thus obtained are collected, wherein the branched polymers of glucose comprise, at every 10 to 14 glucose units, an additional chain of glucose units,

wherein the branching enzyme is extracted from unicellular algae.

20. (previously presented) The process for manufacture of soluble branched polymers of glucose essentially containing no β-glucosidic bonds according to Claim 19, wherein:

a) an aqueous solution of starch or of starch derivative of dry matter of 1 to 50% by weight is subjected to a temperature lying between 140 and 150°C, under a pressure lying between 4 and 5 bars, for 2 to 5 mins,

b) the starch or starch derivative thus obtained is treated with 50 to 2,000 units of purified branching enzyme at a temperature of 30°C, for a duration from 10 mins to 24 hrs, and

c) the branched polymers of glucose thus obtained are collected.

21. (previously presented) The process for manufacture of soluble branched polymers of glucose according to Claim 19, wherein the branching enzyme is selected from the group consisting of glycogen branching enzymes, starch branching enzymes and any mixtures of these enzymes.

22. (previously presented) The process for manufacture of soluble branched polymers of glucose according to Claim 19, wherein the branching enzyme is extracted from organisms and/or from microorganisms selected from the group

consisting of higher plants, yeasts, bacteria and unicellular algae.

23. (cancelled)

24. (currently amended) The process for manufacture of soluble branched polymers of glucose according to Claim [[23]] 19, wherein the branching enzyme extracted from algae is obtained by isolation from a genetically modified organism capable of expressing the said enzyme.

25-30. (cancelled)

31. (previously presented) Soluble branched polymers of glucose containing essentially no β-glucosidic bonds and having:

- between 2.5 and 10% of α-1, 6 glucosidic bonds,
- a very low or zero tendency to retrograde in aqueous solution, determined according to a test A,
- a Mw determined according to a test C at a median value of the molecular weight distribution profile lying between 10^4 and 10^8 daltons, and
- a reducing sugar content of at most 9%;

said polymers being in isolated and purified form and comprising, at every 10 to 14 glucose units, an additional chain of glucose units.

32. (previously presented) The soluble branched polymers of glucose according to claim 31, wherein said soluble branched polymers of glucose have between 2.5 and 5% of α-1, 6 glucosidic bonds.

33. (previously presented) The soluble branched polymers of glucose according to claim 31, wherein said soluble branched polymers of glucose have a reducing sugar content of at most 1%.

34. (previously presented) Soluble branched polymers of glucose containing essentially no β-glucosidic bonds obtained according to the process of claim 31, having:

- between 2.5 and 10% of α-1, 6 glucosidic bonds,
- a very low or zero tendency to retrograde in aqueous solution, determined according to test A,
- a Mw determined according to a test C at a median value of the molecular weight distribution profile lying between 10^4 and 10^5 daltons, and
- a reducing sugar content of at most 9%.

35. (previously presented) Soluble branched polymers of glucose according to claim 31, having a viscosity determined according to a test B of at most 5,000 cP.

36. (currently amended) Soluble branched polymers of glucose according to claim 31 obtained after 30 mins at 30°C with the branching enzyme extracted from unicellular algae, having:

- between 2.5 and 5% of α-1, 6 glucosidic bonds,
- a Mw determined according to a test C at a median value of the molecular weight distribution profile lying between 10^5 and 10^6 daltons, and
- a reducing sugar content of at most 1%.

37. (currently amended) Soluble branched polymers of glucose according to claim 31 obtained after 2 hrs at 30°C with the branching enzyme extracted from unicellular algae, having:

- between 5 and 10% of α-1, 6 glucosidic bonds,
- a Mw determined according to a test C at a median value of the molecular weight distribution profile lying between 10^7 and 10^8 daltons, and
- a reducing sugar content of at most 1%.

38. (currently amended) A process for manufacture of soluble branched polymers of glucose essentially containing no β-glucosidic bonds, wherein:

a) an aqueous solution of starch or of starch derivative of dry matter of 1 to 50% by weight, is subjected to a temperature greater than 130°C, under a pressure of more than 3.5 bars, for 2 to 5 mins,

b) the starch or starch derivative thus obtained is treated with 50 to 2,000 units of purified branching enzyme at a temperature lying between 25 and 50°C for a duration from 10 mins to 24 hrs, wherein the purified branching enzyme is one selected from the group consisting of ~~the branching enzyme of *E. coli*,~~ the branching enzyme of *C. reinhardtt* and the branching enzyme of maize, and

c) the branched polymers of glucose thus obtained are collected, wherein the branched polymers of glucose comprise, at every 10 to 14 glucose units, an additional chain of glucose units.

39. (previously presented) The process according to claim 19, wherein said purified branching enzyme is capable of treating the starch or starch derivative to produce said soluble branched polymers of glucose essentially containing no β-glucosidic bonds and having:

- between 2.5 and 10% of α-1, 6 glucosidic bonds,

- a very low or zero tendency to retrograde in aqueous solution, determined according to a test A,

- a molecular weight determined according to a test C at a median value of the molecular weight distribution profile lying between 10^4 and 10^8 daltons, and

- a reducing sugar content of at most 9%,

wherein said soluble branched polymers of glucose in isolated and purified form comprise, at every 10 to 14 glucose units, an additional chain of glucose units.

40. (previously presented) The process according to claim 19, wherein said purified branching enzyme is capable of adding an additional chain of glucose units, at every 10 to 14 glucose units of said starch or starch derivative.

41. (currently amended) The process according to claim 19, wherein said purified branching enzyme is a 1,4-α-glucan branching enzyme ~~or an EC2.4.1.18 enzyme~~.

42. (previously presented) A process for manufacture of soluble branched polymers of glucose essentially containing no β-glucosidic bonds, said method comprising:

a) subjecting an aqueous solution of starch or of starch derivative of dry matter of 1 to 50% by weight to a

temperature greater than 130°C, under a pressure of more than 3.5 bars, for 2 to 5 mins;

b) treating the starch or starch derivative obtained in step a) with 50 to 2,000 units of purified branching enzyme at a temperature lying between 25 and 50°C for a duration from 10 mins to 24 hrs, wherein the purified branching enzyme is selected from the group consisting of glycogen branching enzymes and starch branching enzymes; and

c) collecting the branched polymers of glucose obtained from step b) to produce said soluble branched polymers of glucose essentially containing no β-glucosidic bonds and having:

- between 2.5 and 10% of α-1, 6 glucosidic bonds,

- a very low or zero tendency to retrograde in aqueous solution, determined according to a test A,

- a molecular weight determined according to a test C at a median value of the molecular weight distribution profile lying between 10^4 and 10^8 daltons, and

- a reducing sugar content of at most 9%,

wherein said soluble branched polymers of glucose in isolated and purified form comprise, at every 10 to 14 glucose units, an additional chain of glucose units.

43. (cancelled)

44. (previously presented) The process according to claim 42, wherein said starch branching enzyme is the type I and type II starch branching enzyme obtained from *C. reinhardtt* or maize.

45. (currently amended) A process for manufacture soluble branched polymers of glucose essentially containing no beta-glucosidic bonds, wherein:

a) an aqueous solution of starch or of starch derivative of dry matter of 1 to 50% by weight, is subjected to a temperature greater than 130°C, under a pressure of more than 3.5 bars, for 2 to 5 mins,

b) the starch or starch derivative thus obtained is treated with 50 to 2,000 units of purified branching enzyme extracted from unicellular algae ~~or from *E. coli*~~, at a temperature lying between 25 and 50°C for a duration from 10 mins to 24 hrs, and

c) the branched polymers of glucose thus obtained are collected, wherein the branched polymers of glucose comprise, at every 10 to 14 glucose units, an additional chain of glucose units,

wherein the branching enzyme extracted from unicellular algae is obtained by isolation from a genetically modified organism capable of expressing the said enzyme.

46. (currently amended) ~~The process according to Claim 45, wherein:~~ A process for manufacture of soluble branched polymers of glucose essentially containing no beta-glucosidic bonds, comprising:

a) subjecting an aqueous solution starch or of starch derivative of dry matter 1 to 50% by weight ~~is subjected~~ to a temperature lying between 140 and 150°C, under a pressure lying between 4 and 5 bars, for 2 to 5 mins,

b) treating the starch or starch derivative thus obtained ~~is treated~~ with 50 to 2,000 units purified branching enzyme extracted from unicellular algae ~~or from *E. coli*~~, at a temperature of 30°C, for a duration from 10 mins to 24 hrs, and

c) collecting the branched polymers glucose thus obtained ~~are collected~~, wherein,

the branched polymers of glucose comprise, at every 10 to 14 glucose units, an additional chain of glucose units, and

the branching enzyme extracted from algae is obtained by isolation from a genetically modified organism capable of expressing the said enzyme.

47. (previously presented) The process according to Claim 45, wherein the branching enzyme is selected from the

group consisting of glycogen branching enzymes, starch branching enzymes and any mixtures these enzymes.

48. (cancelled)

49. (previously presented) The process according to Claim 46, wherein the branching enzyme is selected from the group consisting of glycogen branching enzymes, starch branching enzymes and any mixtures these enzymes.

50. (cancelled)